

AMENDMENTS TO THE CLAIMS

Claims 1-2, 8-12 and 51-53 are currently pending in this application with entry of this amendment. Claims 51-53 are presently added. Claims 3-7 and 13-49 were previously withdrawn, and Claim 50 is presently withdrawn.

1. (Currently Amended) A method of screening for an agent that modulates bone mineralization, said method comprising:

contacting an osteogenic cell expressing ~~containing~~ a NELL-1 gene with a test agent; and detecting an expression level of said NELL-1 gene in the contacted cell, where a difference in the expression level of NELL-1 in the contacted cell compared to an expression level of NELL-1 in a cell that is not contacted indicates that said test agent is an agent that modulates bone mineralization.

2. (Currently Amended) The method of claim 1, further comprising recording test agents that modulate expressions of the NELL-1 nucleic acid or NELL-1 protein in a database of test agents modulating ~~modulators of~~ NELL-1 activity or in a database of test agents modulating ~~modulators of~~ bone mineralization.

Claims 3-7 (withdrawn)

8. (Original) The method of claim 1, wherein said level of NELL-1 is detected by determining the expression level of a NELL-1 protein in said biological sample.

9. (Original) The method of claim 8, wherein said detecting is via a method selected from the group consisting of capillary electrophoresis, a Western blot, mass spectroscopy, ELISA, immunochromatography, and immunohistochemistry.

10. (Original) The method of claim 1, wherein said cell is cultured ex vivo.

11. (Original) The method of claim 1, wherein said test agent is not an antibody.

12. (Original) The method of claim 1, wherein said test agent is not a protein.

Claims 13-49 (withdrawn).

Claim 50 (withdrawn)

51. (New) The method of claim 1, wherein the osteogenic cell is selected from a cell endogenous to a fetal calvarial cell culture.

52. (New) The method of claim 51, wherein the osteogenic cell is selected from the group comprising an osteoblast, a mesenchymal cell, a fibroblast cell, a stem cell, a bone marrow cell, a dura cell, a chondrocyte, and a chondroblast.

53. (New) The method of claim 1, wherein the osteogenic cell is a MC3T3 cell.